tion; that Shaw gave a typical sample of the logic indulged in by the antivivisectionist group; and, that Mencken explained how Shaw's kind of reasoning came into being, and what was its worth.

In the last fifty years, diseases which formerly caused a tremendous toll in human misery and deaths have been brought under subjugation. In the last one hundred years the average life space of humans in the western world has been marvelously increased. That increased number of years in which to live and to serve in the world, largely has come about through scientific research devoted to the study and elaboration of newly discovered and applied scientific facts in relation to the human body, and its functions.

What a sad reflection on the type of modern-day intelligence and culture, that so many lay fellows through philosophical contemplations associated with emotional and unstable mental functioning let their vision of these actual accomplishments of scientific medicine in recent years, in the conservation of human health, life and happiness become so warped, that they are unable to appreciate what that scientific progress has meant to the prosperity and happiness of the human beings and living things in this world in which we of today have our earthly existence.

AN OUTSTANDING COUNTY HEALTH DEPARTMENT

Recently a copy of the 1927-1928 budget of Los Angeles County, compiled by the county auditor, came into our possession. Los Angeles County, with its area of some four thousand square miles, is about two-thirds the size of Massachusetts, and the total assessable wealth of its estimated population of two million, two hundred thousand citizens, is estimated at three billion, three hundred and seventy-one millions of dollars. In the auditor's report of some two hundred large folio pages, there was a presentation of statistical detail dealing with public finances that was quite appalling.

The total appropriations for the cost of government in this county for the current fiscal year came to a grand total of practically thirty-four millions of dollars.

The health and sanitation appropriations totaled \$3,271,880.00, and the charities, hospitals and corrections mounted to \$12,098,177.00!

The Health Department of Los Angeles County was credited with an appropriation of \$1,053,028.00 for the fiscal year.

Endowment funds can rarely be invested in sound securities to net more than 5 per cent; and when so invested, give an annual interest return of fifty thousand dollars on an endowment of each one million dollars.

The Los Angeles County Health Department operates therefore, as if it were receiving the interest return on what would be an endowment of twenty-one millions of dollars! In that light,

the annual budget of the department certainly seems staggering.

Large as is the sum, it becomes more astounding when one realizes that ten years ago when Dr. J. L. Pomeroy, the present county health officer, assumed office, his total budget for the year was only seven thousand two hundred dollars, that sum paying the salaries of himself, a stenographer and one inspector. The entire equipment of his department was contained in a small room in the old court house.

In the intervening ten years, the annual appropriation for the County Health Department work has increased to the amazing figures previously given.

When the current year's appropriation of \$1,053,028.00 is divided by the \$7,200.00 appropriation of ten years ago, it is found that the budget today is one hundred and forty-six times as great as then.

Therefore, the increase of appropriation in this decade, when expressed on a percentage basis, shows that in the current year the department's appropriation is 14,600 per cent greater than ten years ago! This increase in actual sums and percentage probably cannot be duplicated in any other county or similar governmental unit in the United States or abroad.

The trend of preventive medicine in community life is most significantly shown in the astounding figures which have been presented. These figures speak volumes in showing how effective has been the propaganda in preventive medicine which the lay press years ago accepted upon the initiative of physicians, who stressed the need of cooperative community effort if water- and air-born diseases, as typhoid and small-pox, and scourges such as tuberculosis, which were intimately connected with faults in our social fabric, and other diseases, were to be eliminated or held down to a minimum expression.

Without such an awakening of the public comprehension and conscience through this educational preventive work in which physicians were and still are the pioneers and leaders, it would have been quite out of the question for any board of supervisors or public officials to have appropriated such vast sums for public health work as are here quoted. And in equal measure, it would have been impossible for a lone county public health officer, as was practically the case in regard to Dr. J. L. Pomeroy of Los Angeles, to have induced successive boards of county supervisors to embark on more and more public health work, and be willing to expend greater and greater sums therefor.

The questions will naturally be very promptly put: "How is this tremendously large annual appropriation used? Is its use confined to strictly preventive public health work, or does it through state medicine and superpaternalistic methods

improperly trench over into the fields of curative or personal health medicine?"

To answer those questions and many others of analogous import, which very properly could and should be asked would require a detailed study of the Health Department referred to, and at this time and in this place that is not possible. However, such questions and such studies should be made by the organized medical profession, for the protection of the interests of both the public and its own members; and the results of such careful surveys should be placed on record for both the profession and lay citizens.

It may be stated that the auditor's report which is under discussion, shows a County Health Department personnel of 288 persons, the total salary appropriations mounting to \$172,078.00.

The activity divisions of the department include among others the following: administration; communicable diseases; vital statistics; quarantine; sanitation; milk; food; water; child hygiene; public nursing; school nursing; oral hygiene; fresh air schools; tuberculosis; immunization; laboratory; housing.

One of the interesting expressions of this department's work is its cooperation with some twenty-five of the smaller municipalities of the county, giving each of these cities public health supervision and cooperation, the estimated cost usually being divided equally between each city and the county. The reason being to give a better public health service for the same amount of money.

Another very interesting activity is the health centers, which are operated under the supervision of the County Health Department, in special buildings erected by the county, the medical and surgical work being under the control of an attending staff chosen from the physicians of each district. Here some new problems are being solved, but always with the thought in mind of full cooperation with the organized profession.

From what has been here presented, it is evident that many interesting phases of the public health work of Los Angeles County might properly be discussed. On some future occasion this may be possible.

EPHEDRIN—A RECENT ADDITION TO WESTERN MEDICINE, BUT CENTURIES OLD TO THE CHINESE

Chinese herbs and Chinese herb doctors are no novelties to Californians.

True, the enforcement of the state medical practice act has eliminated the "Chinese doctor" pretense, so today the dispensers of the herbs

must be content to hold themselves out as merchants selling herbs, much as clerks in a modern drug store sell patent medicines. Then again, Chinese herb concoctions often have been far from palatable, and for that reason are usually as unattractive to Western eyes as are the dried fish and what-not imported food products so often on display in the grocery or food depots of a Chinatown district.

With an alien tongue, medicaments unpleasant to eye and palate, and a therapeutic system based on a philosophy and empiricism not readily understood by the Western brain, it is little wonder that practically all Chinese drugs and methods have been dismissed with little more than shrugs of the shoulders by Western physicians.

Yet Chinese medicine goes back into a legendary period that antedates very considerably the earliest medical records of Westerns. Sheng Nung,¹ the Chinese father of medicine (B. C. 2737), is given credit for compiling the "Great Herbal." The Nei Ching or "Canon of Medicine" is supposed to have been written about B. C. 1000.

In the Tang dynasty, about A. D. 652, a book entitled "Thousand Gold Remedies" and consisting of sixty volumes appeared.

A citation of some modern Western discoveries, in contrast with the Chinese may be of passing interest:

The catheter was mentioned by Chinese physicians in the seventh century A. D., although Western physicians place its discovery to the credit of Nelaton in 1860.

Organotherapy was early recorded in China, for sheep thyroid for goiter was used by the Chinese in the sixth century, A. D.

Inoculation against smallpox was used in China as early as 1022, A. D.

Chinese state medical schools and examinations are of record in 1068, A. D.

The foregoing notes are given because only recently K. K. Chen, Ph. D.,² a native of China and a former student of the University of Wisconsin Medical School, called the attention of Western physicians to Ma Huang, an herb known in Chinese medicine for some five thousand years, and the active principle of which is the alkaloid ephedrin.

Chen, after working out the active principle, found that a Japanese, Nagai, in 1887 had already accomplished this, and that E. Merck, in Germany, also reported the process in 1888.

Ephedrin is much like adrenalin in its chemical structure and in its action on the human tissues, and was discovered before adrenalin had been worked out. Strange to say, however, its significance had escaped the observation of Western clinical observers until Chen's presentation of its physiological action in December, 1924.

Here was a Chinese drug Ma Huang, used and understood by the Chinese for hundreds of years, with an alkaloid possessing distinct advantages

¹ For an article on "China's Contribution to Medicine in the Past," see Annals of Medical History, Volume viii, No. 2.

² The Action and Clinical Use of Ephedrin, Journal A. M. A., September 11, 1926.